AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-27 (Canceled).

28. (New) A method to optimize a bandwidth of a digital television (DTV) transport stream and to determine transmission cycles for tables to be transmitted as part of the DTV transport stream, the method comprising:

setting transmission cycles for event information tables to be transmitted in sequence according to the following condition:

transmission cycle (EITi-1) < transmission cycle (EITi), for i=1 and 2, a time span covered by EITi-1 being prior to a time span covered by EITi, wherein the transmission cycle for the EIT0 is set narrower than the transmission cycle for the EIT1;

setting a transmission cycle for an extended text table (ETT) containing program description information associated with one of the event information tables other than the EIT0 and the EIT1, wherein the transmission cycle of the ETT is greater than a sum of the transmission cycle of the EIT0 and the transmission cycle of the EIT1.

29. (New) A program and system information protocol (PSIP) generator to optimize a bandwidth of a digital television (DTV) packet stream and to generate tables to be transmitted as part of the DTV transport stream, the PSIP generator comprising:

a transmission cycle determination unit to set transmission cycles for a plurality of event information tables (EITs) to be transmitted in sequence according to the following condition:

transmission cycle (EITi-1) < transmission cycle (EITi) for i=1 and 2, a time span covered by EITi-1 being prior to a time span covered by EITi, wherein the transmission cycle for the EIT0 is set narrower than the transmission cycle for the EIT1,

the transmission cycle determination unit to further set a transmission cycle for an extended text table (ETT) containing program description information associated with one of the EITs other than the EIT0 and the EIT1,

wherein the transmission cycle of the ETT is greater than a sum of the transmission cycle of the EIT0 and the transmission cycle of the EIT1.

30. (New) A method of operating a digital television (DTV) receiver that receives and processes a DTV transport stream, the method comprising:

receiving in a DTV transport stream a sequence of event information tables (EITs) according to the following condition:

transmission cycle (EITi-1)< transmission cycle (EITi) for i=1 and 2, wherein the transmission cycle for the EIT0 is set narrower than the transmission cycle for the EIT1;

parsing EITs from the transport stream;

receiving in the DTV transport stream an extended text table (ETT) containing program description information associated with one of the event information table other than the EIT0 and the EIT1, wherein the transmission cycle of the ETT is greater than a sum of the transmission cycle of the EIT0 and the transmission cycle of the EIT1; and

parsing the ETT from the DTV transport stream.

31. (New) The method of claim 28, wherein the transmission cycle of the ETT corresponds to a transmission cycle of EIT3.

32. (New) The PSIP generator of claim 29, wherein the transmission cycle of the ETT corresponds to a transmission cycle of EIT3.

33. (New) The method of claim 30, wherein the transmission cycle of the ETT corresponds to a transmission cycle of EIT3.